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02/20/2002	Richard B. Meagher	21099.0074U2	6995
90 10/19/2004		. EXAM	INER
NEEDLE & ROSENBERG, P.C.		OUSPENSKI, ILIA I	
FE STREET		ART UNIT	PAPER NUMBER
A 30309-3915		1644	
	02/20/2002 90 10/19/2004 OSENBERG, P.C. EE STREET	02/20/2002 Richard B. Meagher 90 10/19/2004 OSENBERG, P.C. EE STREET	02/20/2002         Richard B. Meagher         21099.0074U2           90         10/19/2004         EXAM           OSENBERG, P.C.         OUSPENS           EE STREET         ART UNIT

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
•	10/079,130	MEAGHER ET AL.
Office Action Summary	Examiner	Art Unit
_	ILIA OUSPENSKI	1644
The MAILING DATE of this communication appe	ears on the cover sheet with	h the correspondence address
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a re within the statutory minimum of thirty ill apply and will expire SIX (6) MONT cause the application to become ABA	ply be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on	_,	
<i>,</i> ·	action is non-final.	
3) Since this application is in condition for allowan	ce except for formal matte	ers, prosecution as to the merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D.	11, 453 O.G. 213.
Disposition of Claims		
. 4)⊠ Claim(s) <u>1-147</u> is/are pending in the application	<b>L</b>	
4a) Of the above claim(s) is/are withdraw		
5) Claim(s) is/are allowed.		
6) Claim(s) is/are rejected.		
7) Claim(s) is/are objected to.		
8)⊠ Claim(s) <u>1-147</u> are subject to restriction and/or	election requirement.	
Application Papers		•
9) The specification is objected to by the Examiner	r.	
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to b	y the Examiner.
Applicant may not request that any objection to the o	drawing(s) be held in abeyand	ce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correcti		
11) The oath or declaration is objected to by the Ex	aminer. Note the attached	Office Action or form PTO-152.
Priority under 35 U.S.C. § 119		440(a) (d) == (6)
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. §	119(a)-(a) or (t).
a) All b) Some * c) None of:	have been marked	
1. Certified copies of the priority documents		onlication No.
2. Certified copies of the priority documents	nave peen received in Ap	received in this National Stage
3. Copies of the certified copies of the prior		BOGIVEU III IIIIS INGIIUNGI SIAYE
application from the International Bureau		ereived
* See the attached detailed Office action for a list of	or the certified copies hour	eccived.
Attachment(s)		
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)	ummary (PTO-413) VMail Date
2) Notice of Draftsperson's Patent Drawing Review (PTO-946) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Pager No(s)/Mail Date		formal Patent Application (PTO-152)

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## **DETAILED ACTION**

- 1. Claims 1 147 are pending.
- 2. The instant application appears to be in sequence compliance for patent applications containing nucleotide sequence and/or amino acid sequence disclosures.

## Restriction Requirement

- 3. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
- Claims 1 34, 42, 112 121, and 130 138, drawn to a hybridoma cell or a population of hybridoma cells, classified in Class 435, subclass 326.
- II. Claims 35 41 and 88 91, drawn to a method of making a hybridoma cell, classified in Class 435, subclass 449.
- III. Claims 43 55 and 110, drawn to a B cell comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 455.
- IV. Claims 56-59, drawn to a method of making a B cell comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 326.
- V. Claims 60 67, drawn to a myeloma cell comprising a vector encoding  $\lg \alpha$  or  $\lg \beta$ , classified in Class 435, subclass 455.

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VI. Claims 68 - 69, drawn to a method of making a myeloma cell comprising a vector encoding  $\lg \alpha$  or  $\lg \beta$ , classified in Class 435, subclass 326.

VII. Claims 70 - 73, 76 - 79, and 82 - 85, drawn to a method of making a monoclonal antibody, classified in Class 435, subclass 70.21.

VIII. Claims 74 - 75, 80 - 81, and 86 - 87, drawn to a monoclonal antibody, classified in Class 530, subclass 388.1.

IX. Claims 92-97, 105-106, and 109, drawn to a transgenic animal comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 800, subclass 13.

X. Claims 98 - 104, drawn to a method of generating a transgenic animal comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 800, subclass 21.

XI. Claims 107 – 108, drawn to a method of identifying a cell that produces a monoclonal antibody that recognizes a specific antigen, classified in Class 435, subclass 7.1.

XII. Claim 111, drawn to a hematopoietic cell comprising a vector encoding  $lg\alpha$  or  $lg\beta$ , classified in Class 435, subclass 455.

XIII. Claims 122 - 129 and 139 - 147, drawn to a population of plasma cells comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 326.

4. Groups I, III, V, VIII, IX, XII, and XIII are different products. Hybridoma cells, B cells, myeloma cells, monoclonal antibodies, transgenic animals, hematopoietic cells and plasma cells differ with respect to their structures and physicochemical properties

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and require non-coextensive searches. Therefore, each product is patentably distinct, and searching of these Inventions would impose an undue burden.

Groups II, IV, VI, VII, X, and XI are different methods. The methods differ with respect to ingredients, method steps, and/or endpoints; therefore, each method is patentably distinct. Furthermore, the distinct ingredients, method steps, and/or endpoints require separate and distinct searches. As such, it would be burdensome to search these Inventions together.

Groups I and VII are related as product and process of using. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the monoclonal antibodies of Group VII can be made by phage display, in addition to the hybridoma cells of Group I.

5. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct method steps. Moreover, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention. Therefore restriction for examination purposes as indicated is proper.

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## Species Election

- 6. This application contains claims directed to the following patentably distinct species of the claimed Inventions I XIII, wherein the surface-expressed antibody receptor is:
  - (A)  $Ig\alpha$ , or
  - (B) lgβ.

These species are distinct because their structures, physicochemical properties and mode of action are different, and they do not share a common structure that is disclosed to be essential for common utility. Furthermore, the examination of these species would require different searches in the scientific literature.

Applicant is required under 35 USC 121 to elect a single disclosed species to which the claims would be restricted if no generic claim is finally held to be allowable. Currently, claim 17, for example, is generic.

- 7. This application contains claims directed to the following patentably distinct species of the claimed Inventions I III, V, VI, and IX, wherein the  $Ig\alpha$  receptor comprises mutations:
  - (A) Y176F,
  - (B) Y182F,
  - (C) Y193F, or
  - (D) Y204F.

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These species are distinct because their structures, physicochemical properties and mode of action are different. Furthermore, the examination of these species would require different searches in the scientific literature.

Applicant is required under 35 USC 121 to elect a single disclosed species to which the claims would be restricted if no generic claim is finally held to be allowable. Currently, claim 23, for example, is generic.

- 8. This application contains claims directed to the following patentably distinct species of the claimed Inventions I III, V, VI, and IX, wherein the  $Ig\beta$  receptor comprises mutations:
  - (A) Y190F, or
  - (B) Y206F.

These species are distinct because their structures, physicochemical properties and mode of action are different. Furthermore, the examination of these species would require different searches in the scientific literature.

Applicant is required under 35 USC 121 to elect a single disclosed species to which the claims would be restricted if no generic claim is finally held to be allowable. Currently, claim 23, for example, is generic.

9. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

10. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims

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and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. *Failure to do so may result in a loss of the right to rejoinder.* 

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

- 11. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
- 12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ILIA OUSPENSKI whose telephone number is 571-272-2920. The examiner can normally be reached on Monday-Friday 9 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILIA OUSPENSKI Examiner Art Unit 1644

September 7, 2004

PHILLIP GAMBEL, PH.D PRIMARY EXAMINER

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9/15/04